

Appl. No. 10/023,148  
Amdt. dated 11/26/04  
Reply to Office Action of 7/29/04

### Remarks

Pursuant to 37 C.F.R. § 1.111, reconsideration of the present application in view of the foregoing amendments and the following remarks is respectfully requested. Claims 1-20 and 41-54 are presented for the Examiner's consideration. Claims 1-20 were previously presented, claims 21-40 were cancelled by a previous amendment and claims 41-54 were added by a previous amendment for the Examiner's consideration. In the last Office Action dated July 29, 2004 the Examiner withdrew Claims 47-50 as being directed to an invention that is independent or distinct from the originally claimed invention because "new claims 47-50 are directed to a **method** of forming a coform non-woven". (emphasis added). Applicants respectfully submit that this is incorrect and that claims 47-50 should be considered because claims 47-50 are directed to "[a] coform nonwoven web formed by a coform process" and not to a coform process.

Claims 1-6, 12-18, 20 and 41-46 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Number 5,952,251 to Jackson et al. (hereinafter Jackson) in view of U.S. Patent Number 6,437,214 to Everett et al. (hereinafter Everett). This rejection is respectfully traversed. Both Jackson and Everett, individually or in combination, fail to teach uniformly dispersing a second material into substantially continuous multicomponent filaments. More specifically, both Jackson and Everett fail to disclose, teach or suggest how to uniformly disperse a second material into substantially continuous multicomponent filaments.

Applicants' claims are directed to a coform nonwoven web having a substantially uniform structure in contrast to prior art coform nonwoven webs which have compositions that generally vary in the z-direction (the direction through the material thickness) (see page 1, lines 25-26 of the present patent application for support for this statement). The presently claimed nonwoven webs are prepared from a plurality of substantially continuous multicomponent thermoplastic filaments and a second material that may be fibers, particles, or a mixture of fibers and particles and require that the second material is substantially uniformly dispersed within the multicomponent thermoplastic filaments in the z-direction of the nonwoven web for example by using a high-speed rotary valve as described in the present patent application and as illustrated in Figure 1. Thus, the present invention provides a coform web having a concentration of the continuous filaments and a concentration of the second material being essentially

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the same at the bottom surface, the top surface and the middle region between the surfaces. For example, the present invention provides a coform web with a concentration of about 15 weight percent continuous filaments at the bottom surface, the top surface and the middle region and about 85 weight percent pulp fibers at the bottom surface, the top surface and the middle region. The Examples in Table 1 further emphasize the improvements achieved in uniformity in the z-direction by using rotary valve to form a coform nonwoven web. Prior art coform nonwoven webs (Samples 1 and 2), in contrast, typically have higher concentrations of continuous filaments and, thus, lower concentrations of the second material, staple fibers and/or particles, at their surfaces compared to the middle region between the surfaces. Both Jackson and Everett fail to disclose, teach or suggest such nonwoven webs. More specifically, although Everett suggests making a "substantially homogeneously mixed" web Jackson, Everett and Jackson in view of Everett fail to disclose, teach or suggest a methods of making coform nonwoven web using a rotary valve and thus, methods of making webs having more uniformity and coform webs having the claimed uniformity.

Therefore, the rejection of claims 1-6, 12- 18, 20 and 41-46 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jackson in view of Everett is untenable and should be withdrawn. Regarding the Examiner's position that the process limitations of claims 41-46 should not be considered, Applicants respectfully disagree. "The structure implied by process steps should be considered when assessing the patentability of product-by-process claims over the prior art." (MPEP section 2113 at the top of page 2100-59 citing *In re Gamer*, 162 USPQ 221,223 (CCPA 1979)).

Claims 1-2, 6-8, 12, 14, 20, 41-46 and 51-54 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over WO 00/66824 to Neely et al. (hereinafter Neely) in view of U.S. Patent Number 6,437,214 to Everett et al. (hereinafter Everett). This rejection is also respectfully traversed. Both Neely and Everett, individually or in combination, fail to teach uniformly dispersing a second material into substantially continuous multicomponent filaments for the reasons stated above. More specifically, both Neely and Everett fail to disclose, teach or suggest how to uniform disperse a second material into substantially continuous multicomponent filaments.

Applicants' claims are directed to a coform nonwoven web having a substantially uniform structure in contrast to prior art coform nonwoven webs which have compositions that generally vary in the z-direction.

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*The absorbent nonwoven web of the present invention has a more vertical layering structure as compared to conventional coforming techniques. To more clearly demonstrate this, FIG 4 diagrammatically shows the layering structure for conventional coform. As can be seen in FIG 4, the conventional coform nonwoven web has a structure such that layers of the material overlap one another in a shingling effect. FIG 5 diagrammatically shows the layering structure for the coform material of the present invention. As can be seen, the layering of the present invention is shorter and in a more vertical arrangement; while the layering in the conventional coform is longer and in a more horizontal direction. There is less overlapping of the layers, which may result in the improved wicking, although this has not been confirmed. This is believed to be caused by the low frequency oscillation of the filaments during formation of conventional coform and the higher level of oscillation which occurs during the formation process of the present invention. (paragraph beginning at the bottom of page 23)*

Examples of such nonwoven webs (Samples 3 and 4) are prepared by using a high-speed rotary valve as described in the present patent application and as illustrated in Figure 1 to provide a coform web having a concentration of the continuous filaments and a concentration of the second material being essentially the same at the bottom surface, the top surface and the middle region between the surfaces. Prior art coform nonwoven webs (Samples 1 and 2) have higher concentrations of continuous filaments and, thus, lower concentrations of the second material, staple fibers and/or particles, at their surfaces compared to the middle region between the surfaces. Thus, Neely and Everett fail to disclose, teach or suggest such nonwoven webs. More specifically, although Everett suggests making a "substantially homogeneously mixed" web Jackson, Everett and Jackson in view of Everett fail to disclose, teach or suggest a methods of making coform nonwoven web using a rotary valve and thus, methods of making webs having more uniformity and coform webs having the claimed uniformity.

Therefore, the rejection of claims 1-2, 6-8, 12, 14, 20, 41-46 and 51-54 rejected 35 U.S.C. § 103(a) as allegedly being unpatentable over Neely in view of Everett is untenable and should be withdrawn.

Claims 10 and 11 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jackson and/or Neely in view of Everett as applied to claim 1 and further in view of WO 00/34567 to Fontenot et al. This rejection is also respectfully traversed. Jackson, Neely and Everett, individually and in combination, fail to disclose,